IFO2175-830 Series

All-In-One 17” Super Slim & Fanless Panel Computer

User’s Manual

Disclaimers

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Safety Approvals

- CE Marking
- FCC Class A

FCC Compliance

This equipment has been tested in compliance with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are meant to provide reasonable protection against harmful interference in a residential installation. If not installed and used in accordance with proper instructions, this equipment might generate or radiate radio frequency energy and cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to another outlet of a circuit that doesn't connect with the receiver.
4. Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with the emission limits.

Safety Precautions

Before getting started, read the following important safety precautions.

1. The **IFO2175-830 Series** does not come equipped with an operating system. An operating system must be loaded first before installing any software into the computer.
2. Be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.
3. Disconnect the power cord from the **IFO2175-830 Series** before any installation. Be sure both the system and external devices are turned OFF. A sudden surge of power could ruin sensitive components that the **IFO2175-830 Series** must be properly grounded.
4. Make sure it is the correct voltage of the power source before connecting the equipment to the power outlet.
5. The brightness of the flat panel display will be getting weaker as a result of frequent usage. However, the operating period varies depending on the application environment.
6. Turn OFF the system power before cleaning. Clean the system using a cloth only. Do not spray any liquid cleaner directly onto the screen. The **IFO2175-830 Series** may come with or w/o a touchscreen. Although the touchscreen is chemical resistant, it is recommended that you spray the liquid cleaner on a cloth first before wiping the screen. In case your system comes without the touchscreen, you must follow the same procedure and not spray any cleaner on the flat panel directly.
7. Avoid using sharp objects to operate the touchscreen. Scratches on the touchscreen may cause malfunction or internal failure to the touchscreen.
8. The flat panel display is not susceptible to shock or vibration. When assembling the **IFO2175-830 Series**, make sure it is securely installed.
9. Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20℃ or above 60℃. It may damage the equipment.
10. External equipment intended for connection to signal

input/out or other connectors shall comply with relevant UL/IEC standard.

11. Do not open the system's back cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:
    - Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on your body.
    - When handling boards and components, wear a wrist-grounding strap, available from most electronic component stores.

Classification

1. Degree of production against electric shock: not classified
2. Degree of protection against the ingress of water: IPX1
3. Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
4. Mode of operation: Continuous
5. Type of protection against electric shock: Class I equipment

General Cleaning Tips

You may need the following precautions before you begin to clean the computer. When you clean any single part or component for the computer, please read and understand the details below fully.

1. When you need to clean the device, please rub it with a piece of dry cloth.
2. Be cautious of the tiny removable components when you use a vacuum cleaner to absorb the dirt on the floor.
3. Turn the system off before you start to clean up the component or computer.
4. Never drop the components inside the computer or get circuit board damp or wet.
5. Be cautious of all kinds of cleaning solvents or chemicals when you use it for the sake of cleaning. Some individuals may be allergic to the ingredients.
6. Try not to put any food, drink or cigarette around the computer.

Cleaning Tools:

Although many companies have created products to help improve the process of cleaning your computer and peripherals users can also use household items to clean their computers and peripherals. Below is a listing of items you may need or want to use while cleaning your computer or computer peripherals.

Keep in mind that some components in your computer may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning.

- Cloth: A piece of cloth is the best tool to use when rubbing up a component. Although paper towels or tissues can be used on most hardware as well, we still recommend you to rub it with a piece of cloth.
- Water or rubbing alcohol: You may moisten a piece of cloth a bit with some water or rubbing alcohol and rub it on the computer. Unknown solvents may be harmful to the plastics parts.
- Vacuum cleaner: Absorb the dust, dirt, hair, cigarette particles, and other particles out of a computer can be one of the best methods of cleaning a computer. Over time these items can restrict the airflow in a computer and cause circuitry to corrode.

- Cotton swabs: Cotton swaps moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
- Foam swabs: Whenever possible it is better to use lint free swabs such as foam swabs.

Note *We strongly recommended that you should shut down the system before you start to clean any single components.*

Please follow the steps below:

1. Close all application programs
2. Close operating software
3. Turn off power switch
4. Remove all device
5. Pull out power cable

Scrap Computer Recycling

If the computer equipments need the maintenance or are beyond repair, we strongly recommended that you should inform your Axiomtek distributor as soon as possible for the suitable solution. For the computers that are no longer useful or no longer work well, please contact your Axiomtek distributor for recycling and we will make the proper arrangement.

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CHAPTER 1
INTRODUCTION

This chapter contains general information and detailed specifications of the **IFO2175-830 Series**. Chapter 1 includes the following sections:

- **General Description**
- **Features**
- **System Specification**
- **Dimensions**
- **I/O Outlets**
- **Package List**

1.1 General Description

The IFO2175-830 is an ultra slim panel computer equipped with 17-inch 300nits high brightness SXGA LCD display and supports superior Intel® Atom™ N270 1.6GHz processor with FSB 533MHz. Powered by Intel® 945GSE +ICH7M core logic chipset, this panel computer has better graphic performance. The panel also supports Dual View and multiple I/O options including 4 USB 2.0, 4 RS-232 ports. Furthermore, the IFO2175-830 supports antenna for wireless (802.11 b/g) expansion. The IFO2175-830 is designed to work with low noise, low power consumption, high reliability and high performance applications. Besides, excellent ID (industrial design) and user friendly interface design make the IFO2175-830 perfect with super slim, professional outlook, better user interface, and excellent protection at once! This safe, reliable & user-friendly panel computer can ensure customer's project success and best suited for PIO/POS/kiosk, media content display, and HMI solutions.

1.2 Features

- 17" high brightness (380nits) SXGA TFT LCD
- Intel® Atom™ N270 1.6GHz processor with FSB 533MHz onboard
- NEMA 4/12 (IP65) - compliant front bezel
- IPx1 – whole enclosure
- Fanless and noiseless operation
- Optional 1.3 mega pixels camera
- Optional wireless (802.11 b/g) antenna

1.3 System Specifications

FRONT BEZEL	PLASTIC ABS	
LCD PANEL	DISPLAY TYPE	17" SXGA TFT
	BRIGHTNESS (cd/m^2)	380 nits
	RESOLUTION	1280 x 1024
	VIEWING ANGLE (H/V)	160º/160º

MAIN SYSTEM	CPU	Intel® Atom™ N270 1.6GHz processor with FSB 533MHz
	CHIPSET	INTEL® 945GSE+ICH7M
	SYSTEM MEMORY	SUPPORTS 1 DDR2 SODIMM MEMORY UP TO 2 GB
	STORAGE	1 x 2.5" SATA HDD DRIVE BAY
	OPTICAL DRIVE	OPTIONAL 1 COMPACT COMBO DRIVE
I/O CONNECTORS	1 x RS-232/RS-422/RS-485 (COM 1)	
	3 x RS-232	
	4 x USB 2.0	
	1 x PS/2 MOUSE AND KEYBOARD	
	1 x AUDIO (MIC-IN/LINE-OUT)	
	1 x VGA	
	2 x 10/100/1000Mbps ETHERNET	
	1 x 12V DC-IN POWER CONNECTOR	
CAMERA	1 x 1.3 MEGA PIXELS CAMERA (option)	
TOUCHSCREEN	RESISTIVE TYPE	
	LIGHT TRANSMISSION: 80%	
	TOUCH LIFETIME: 35 MILLION TOUCHES	
POWER SUPPLY	12VDC, w/ AC-DC POWER ADAPTOR	
DIMENSIONS	437.98mm (17.24") (W) x 76.5mm (3.01") (D) x 376.41mm (14.81") (H)	
WEIGHT	7.65kg (16.85 lb)	

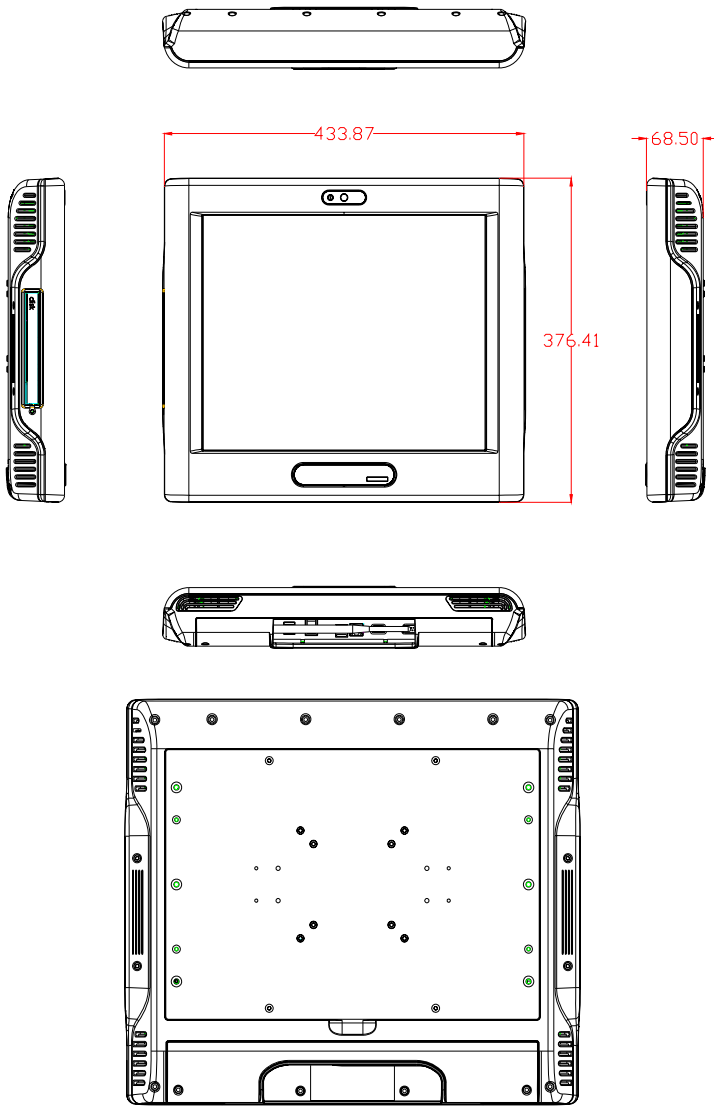
ENVIRONMENTAL	OPERATION TEMPERATURE: 0ºC~40ºC (32ºF~104ºF)
	RELATIVE HUMIDITY: 10%~95%, NON-CONDESING
	SHOCK: 10G PEAK ACCELERATION (11 SEC. DURATION)
CERTIFICATION	CE

NOTE *All specifications and images are subject to change without notice.*

NOTE *If it is operated in high temperature environment, the wide temperature DRAM and HDD are recommended.*

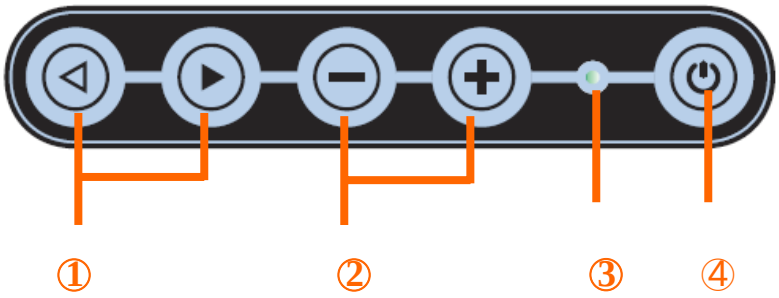
1.4 Dimensions

The following diagrams show you dimensions and outlines of the **IFO2175-830 Series**.

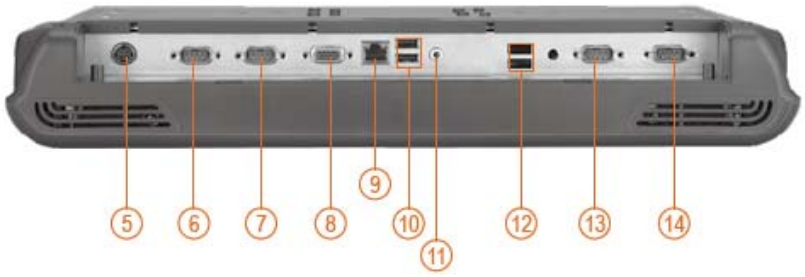


1.5 I/O Outlets

The following figures show you the locations of the **IFO2175-830 Series** I/O outlets.



- **I/O Outlets**



NO	CONNECTOR
1	BRIGHTNESS ADJUST BUTTONS
2	VOLUME ADJUST BUTTONS
3	POWER LED
4	POWER SWITCH
5	DC-IN POWER CONNECTOR
6	COM 1 (RS-232/422/485)
7	COM 2 (RS-232)
8	VGA
9	ETHERNET
10	USB 2.0 x 2
11	AUDIO (LINE-OUT)
12	USB 2.0 x 2
13	COM 3 (RS-232)
14	COM 4 (RS-232)

1.6 Packing List

The package bundled with your **IFO2175-830** should contain the following items:

- IFO2175-830 Series Unit x 1
- 12VDC, w/ AC-DC Power Adaptor
- Power Cord x 1
- CD x 1 (For Driver and User's Manual)
- DVD-combo Cover x 2 (For within DVD-combo) (option)
- SATA cable x 1
- Cable Management Kit x 2
- Fuse x 1
- Wall-Mount Bracket x 1
- M4 x 8 Screws x 4 (for VESA Mounting)
- M3 x 5 Screws x 2 (for Cable Management Kit)

If you can not find this package or any items are missing, please contact AXIOMTEK distributors immediately.

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CHAPTER 2
HARDWARE INSTALLATION

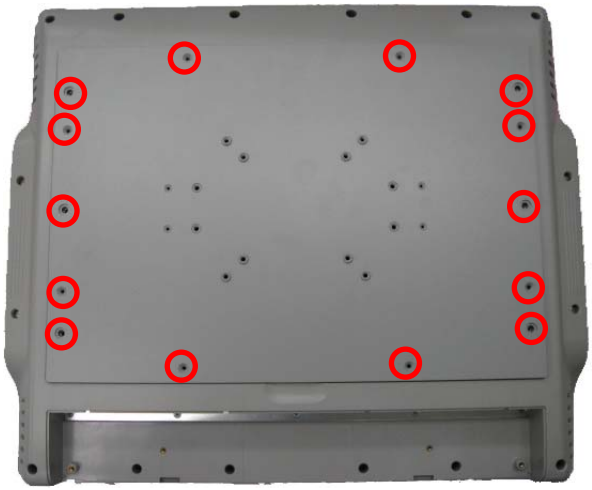
The **IFO2175-830 Series** are convenient for your various hardware configurations, such as CPU (Central Processing Unit) and HDD (Hard Disk Drive). The chapter 2 will show you how to install the hardware. It includes:

2.1 DRAM Installation

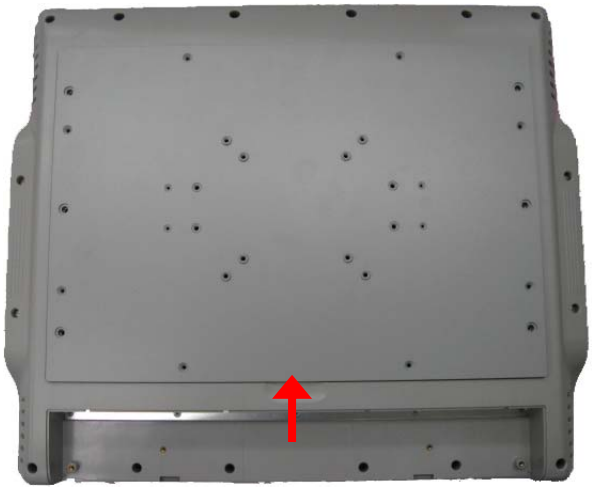
The IFO2175-830 provides one 200-pin DDR2 SODIMM sockets that support system memory up to 2GB. Please follow steps below to install the memory modules:

Step 1 Turn off the system, and unplug the Power cord.

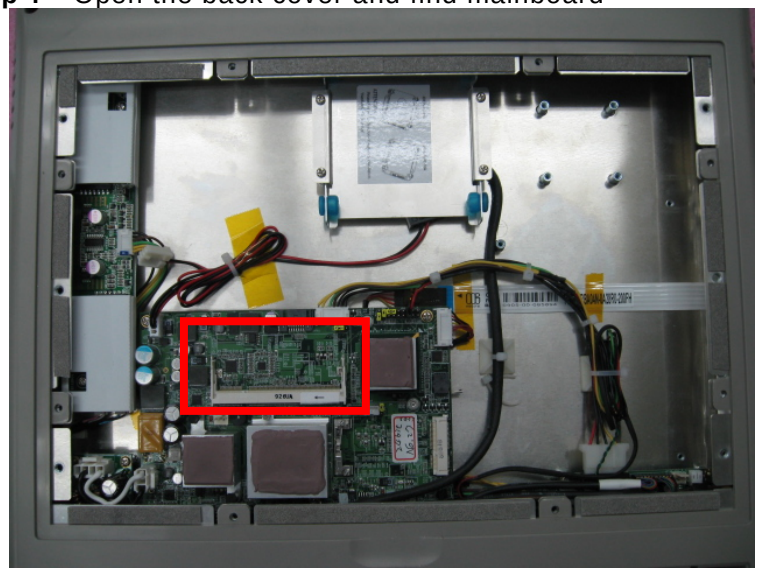
Step 2 Locate and release these screws to open the back cover



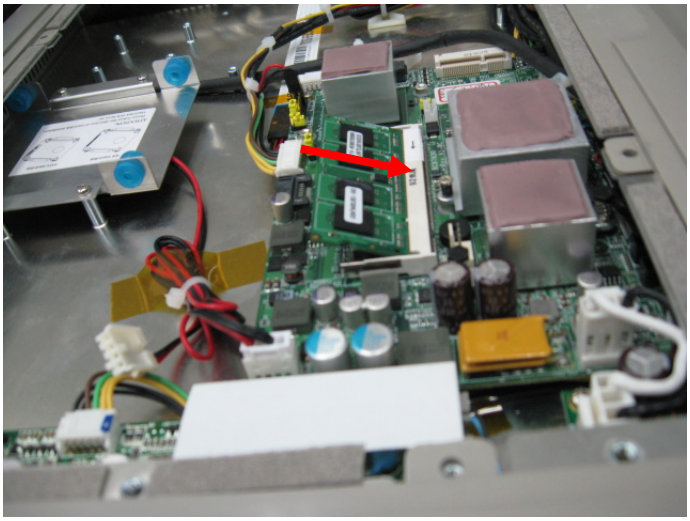
Step 3 Please open the back cover by lifting the joint part as marked.



Step 4 Open the back cover and find mainboard



Step 5 Push down latches on each side of the DIMM socket.



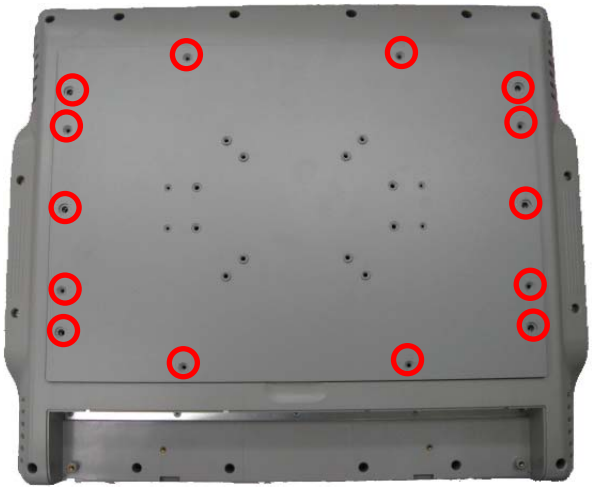
Step 6 Install the memory module into the socket and push it firmly down until it is fully seated. The socket latches are levered upwards and clipped on to the edges of the DIMM.

2.2 Hard Disk Drive Installation

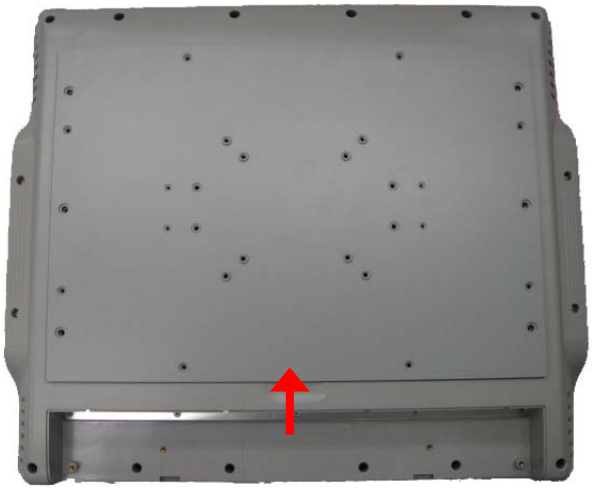
The **IFO2175-830 Series** offers a convenient drive bay module for users to install HDD. The system offers users one 2.5" Hard Disk Drive for installation. Please follow the steps:

Step 1 Turn off the system, and unplug the Power cord.

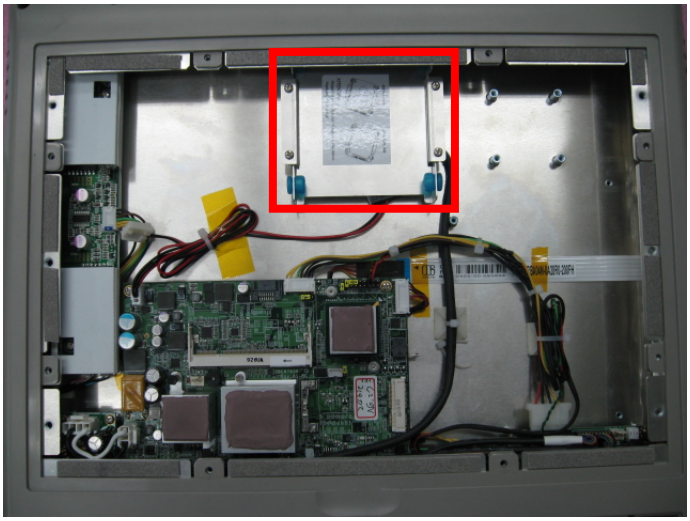
Step 2 Locate and release these screws to open the back cover.



Step 3 Please open the back cover by lifting the joint part as marked.



Step 4 Locate the HDD socket as marked.

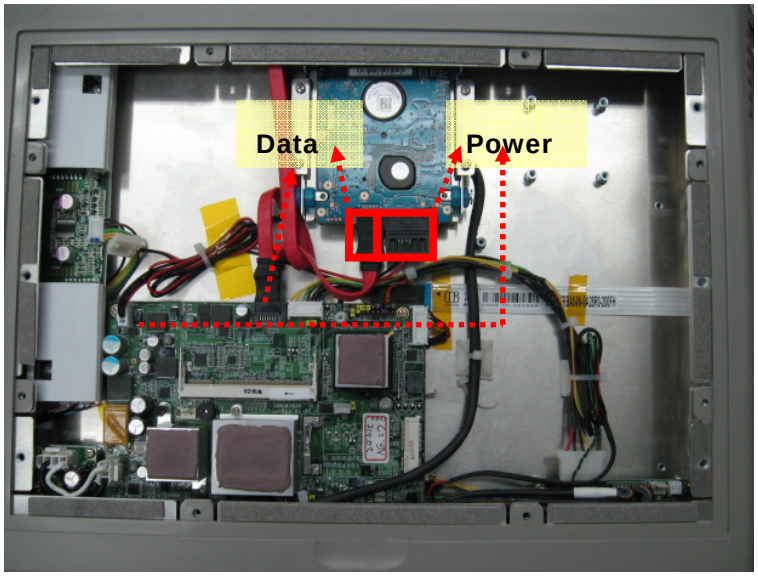


Step 5 Use assembly parts to fix HDD with the bracket.

1. HDD Bracket x1
2. 2.5 inch Hard-disk
3. Screw x 4
4. Assembly the HDD with the bracket.

ATTENTION *Please follow the direction of Hard-disk installation. "Hard-disk PCB facesup".*

Step 6 Install the HDD bracket inside the system. Plug the SATA and Power cables in HDD.



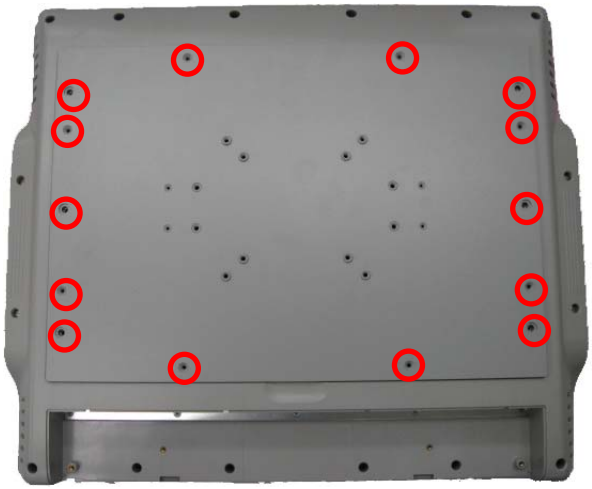
Step 7 Close the back cover to the chassis, and fasten all screws.

2.3 CF Card Installation

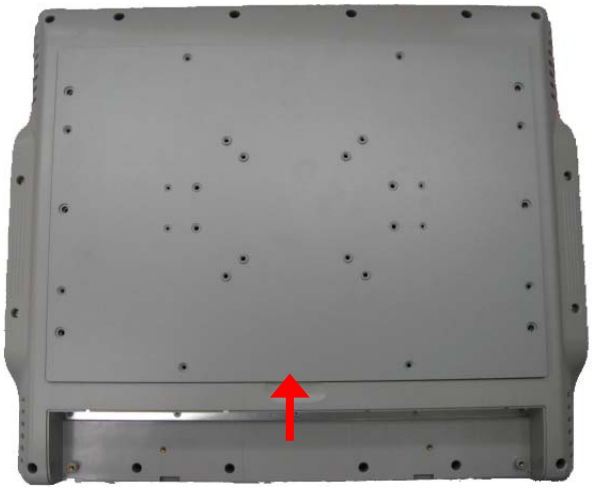
The **IFO2175-830 series** provides one CF slot for users to install CompactFlash™ card. Please refer to the following instructions for installation:

Step 1 Turn off the system, and unplug the Power cord.

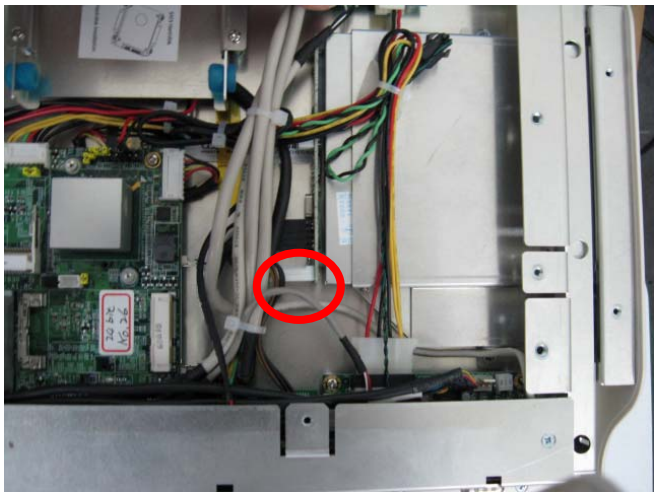
Step 2 Locate and release these screws to open the back cover.



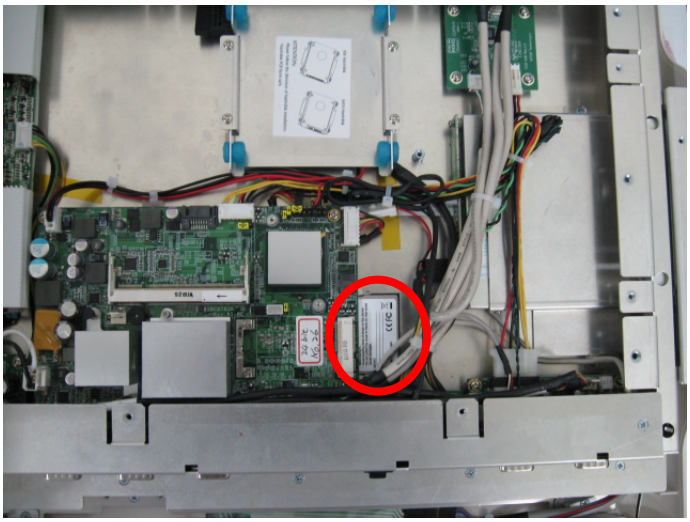
Step 3 Please open the back cover by lifting the joint part as marked.

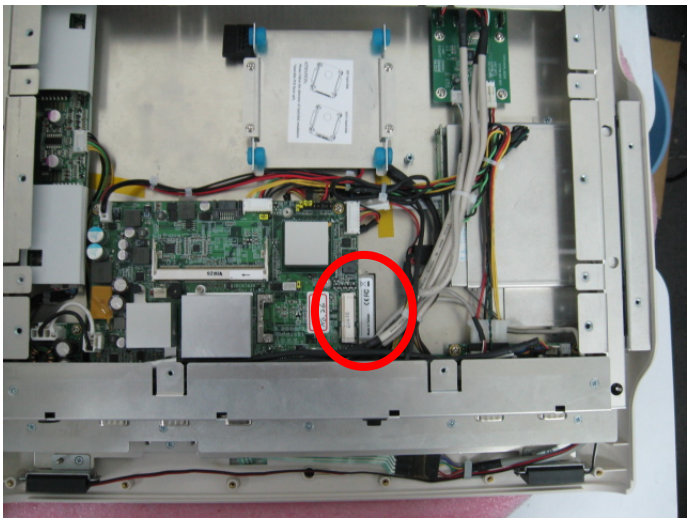


Step 4 Unplug the CD-ROM Power cord, if IFO2175-830 is with CD-ROM version.

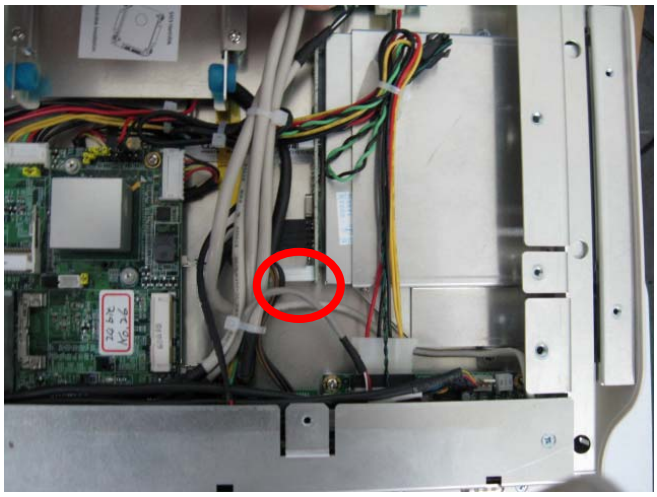


Step 5 Locate the CompactFlash™ socket, and insert the card into the socket.





Step 6 Plug the CD-ROM Power cord, if IFO2175-830 is with CD-ROM version.



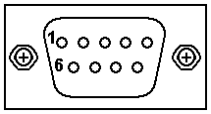
Step 7 Close the back cover to the chassis, and fasten all screws.

2.4 Serial Ports Interface

The **IFO2175-830 series** has two onboard serial ports, COM1 (RS-232/ 422/ 485) and COM2 (RS-232).

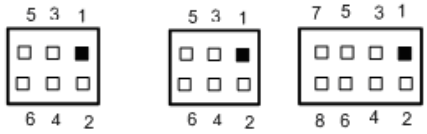
The following table shows you the pin assignments of this connector:

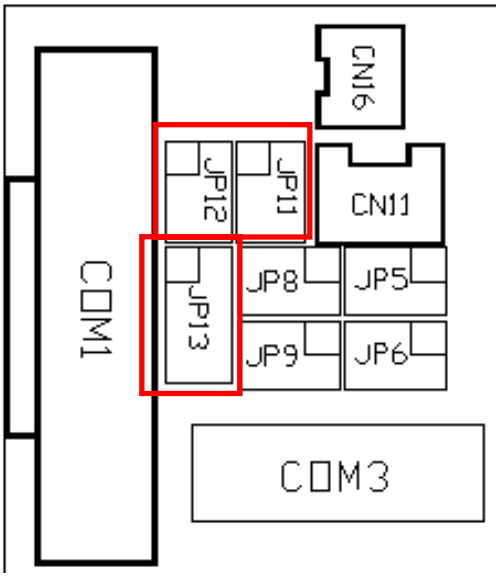
Pin	Signal	Pin	Signal
1	Data Carrier Detect (DCD)	6	Data Set Ready (DSR)
2	Receive Data (RXD)	7	Request To Send (RTS)
3	Transmit Data (TXD)	8	Clear To Send (CTS)
4	Data Terminal Ready (DTR)	9	Ring Indicator (RI)
5	Ground (GND)		



In addition, COM1 can be set for RS-232/422/485 by jumper. The jump setting is listed as below:

COM1	JP11	JP12	JP13
RS-232 (default)	3-5, 4-6	3-5, 4-6	1-2
RS-422	1-3, 2-4	1-3, 2-4	3-4, 7-8
RS-485	1-3, 2-4	1-3, 2-4	5-6, 7-8





When COM1 is set to RS-422 or RS-485, the pin assignments are listed below:

Pin #	Signal Name	
	RS-422	RS-485
1	TX-	DATA-
2	TX+	DATA+
3	RX+	No connector
4	RX-	No connector
5	No connector	No connector
6	No connector	No connector
7	No connector	No connector
8	No connector	No connector
9	GND	GND

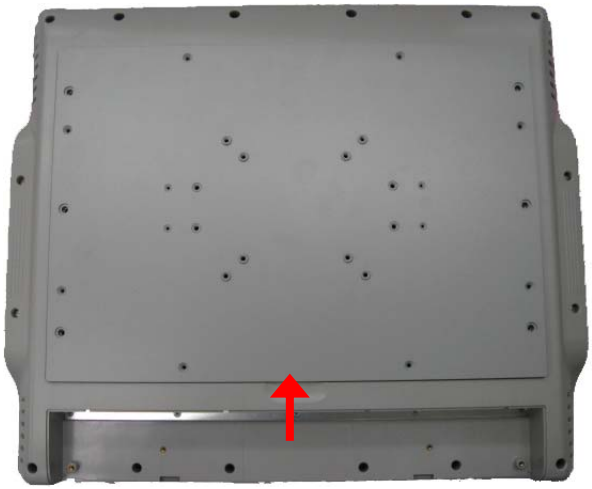
2.5 Wireless Module Installation (Optional)

You can follow the steps below to install an optional wireless module.

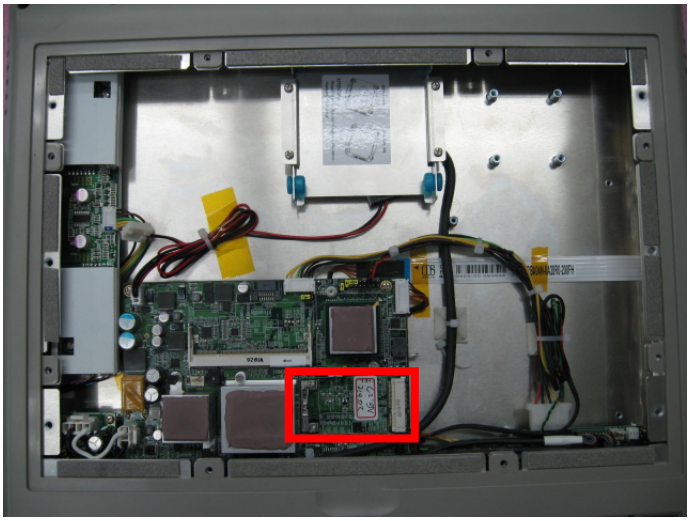
Step 1 Turn off the system, and unplug the Power cord.

Step 2 Locate and release these screws to open the back cover.

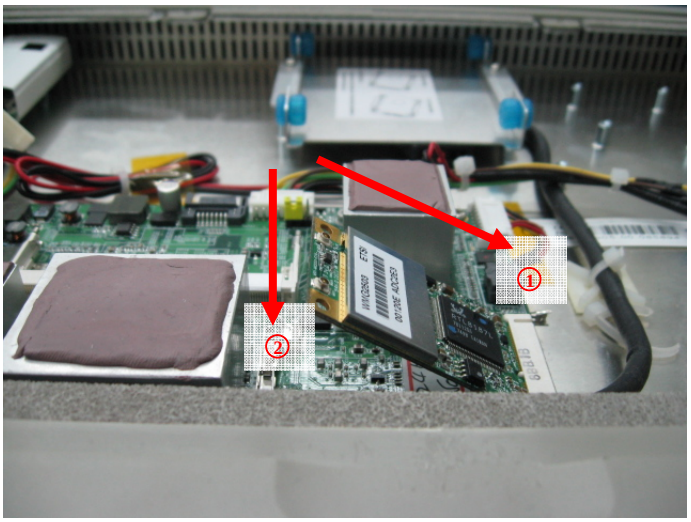
Step 3 Please open the back cover by lifting the joint part as marked.

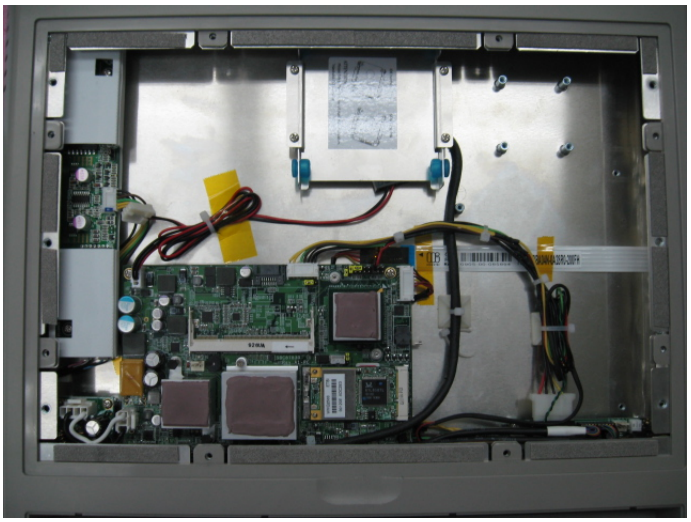


Step 4 Open the back cover and find mainboard (SBC87830).



Step 5 The socket latches are clipped on to the edges of the Mini card. Install wireless LAN card to the socket.

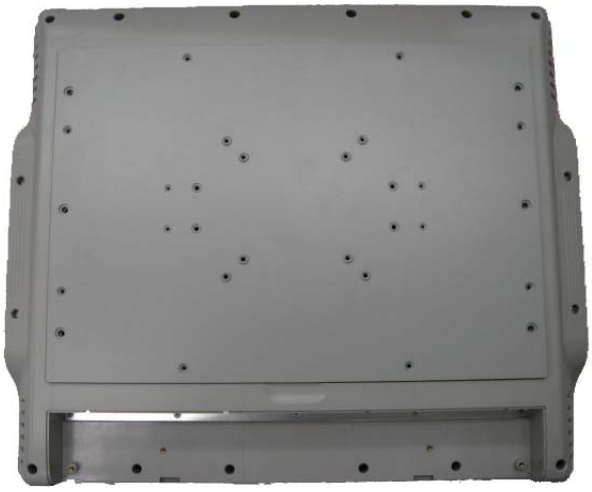




Step 6 There are two choices of antennas which are installed in IFO2175-830 series. One is build-in antennas. The other is external antennas. Please follow the steps:

Step 7 Find the built-in Antenna cable which is tied with other cables on the bottom of the device. There are two connectors on wireless LAN card. One is MAIN, and the other is AUX. Connect antenna cable to **MAIN** connector on wireless LAN card.

Step 8 Close the back cover to the chassis, and fasten all screws.



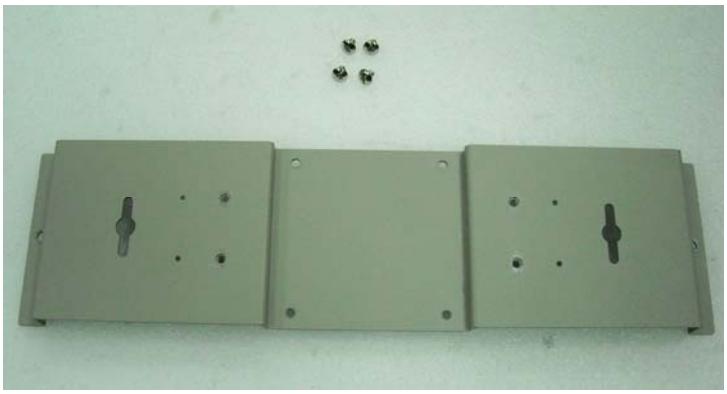
2.6 Mountings (Optional)

There are several mounting ways for the **IFO2175-830 Series**, Wallmount, VESA and Desktop mountings as below:

2.6.1 Wallmount (Optional)

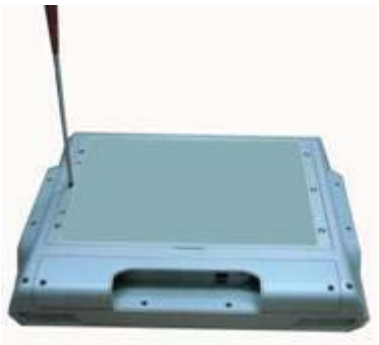
The mounting for IFO2175-830 Series is Wallmount as below:

Step 1 Prepare all parts for installing the wallmount kit.



Step 2 Assemble the mallmount kit by using screws to fix the backplane.

①

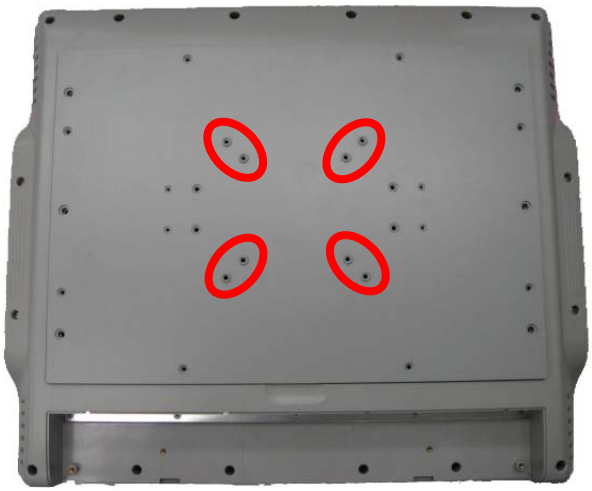


②

2.6.2 VESA Mount (Optional)

The mounting for IFO2175-830 Series is VESA-Arm as below:

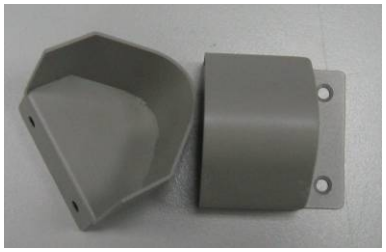
Assemble the VESA-Arm by using screws to fix the backplane.



2.6.3 Desktop Stand (Optional)

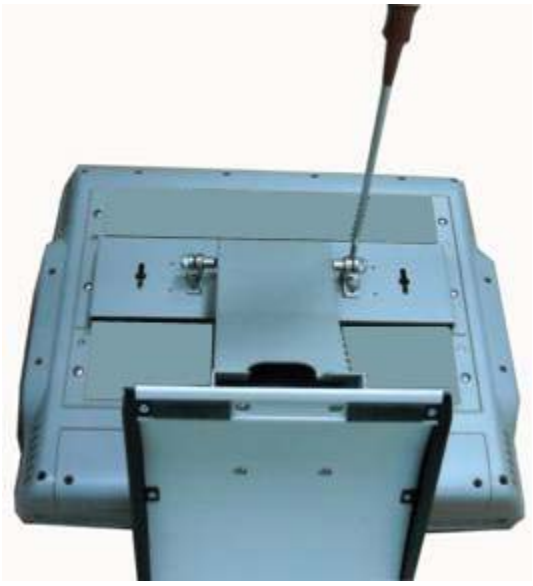
The IFO2175-830 Series provides you with an optional Desktop Stand that you can follow the steps below:

Step 1 Prepare the parts of desktop stand.

Screw A	Screw B
Screw C	**Hinge Cover**
	

Step 2 Assemble the desktop stand. Fix the screws as marked on the bottom side of chassis. (Use Screw A)

Step 3 Fix the screws as marked on the back side of chassis (Use Screw B).



Step 3 Fix the desktop stand firmly.

Rear View

Front View

MEMO

CHAPTER 3
AMI BIOS SETUP UTILITY

This chapter provides users with detailed description how to set up basic system configuration through the AMI BIOS setup utility.

3.1 Starting

To enter the setup screens, follow the steps below:

1. Turn on the computer and press the <Del> key immediately.
2. After you press the <Delete> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Chipset and Power menus.

3.2 Navigation Keys

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process.
These keys include <F1>, <F10>, <Enter>, <ESC>, <Arrow> keys, and so on.

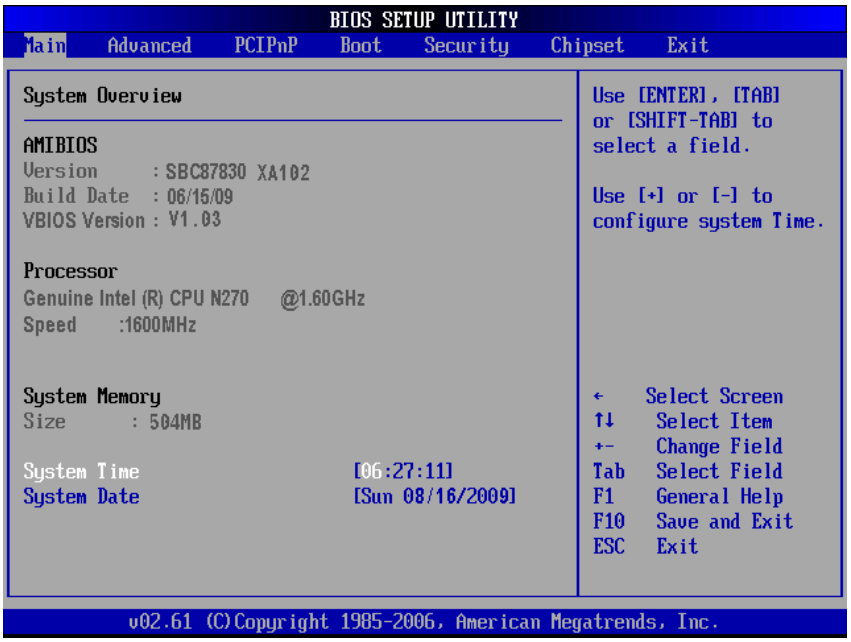
Note *Some of navigation keys differ from one screen to another.*

← Left/Right	The Left and Right <Arrow> keys allow you to select a setup screen.
↑↓ Up/Down	The Up and Down <Arrow> keys allow you to select a setup screen or sub-screen.
+– Plus/Minus	The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item.
Tab	The <Tab> key allows you to select setup fields.
F1	The <F1> key allows you to display the General Help screen.

F10	The <F10> key allows you to save any changes you have made and exit Setup. Press the <F10> key to save your changes.
Esc	The <Esc> key allows you to discard any changes you have made and exit the Setup. Press the <Esc> key to exit the setup without saving your changes.
Enter	The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub- screens.

3.3 Main Menu

When you first enter the Setup Utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below.



- **System Time/Date**
  Use this option to change the system time and date. Highlight

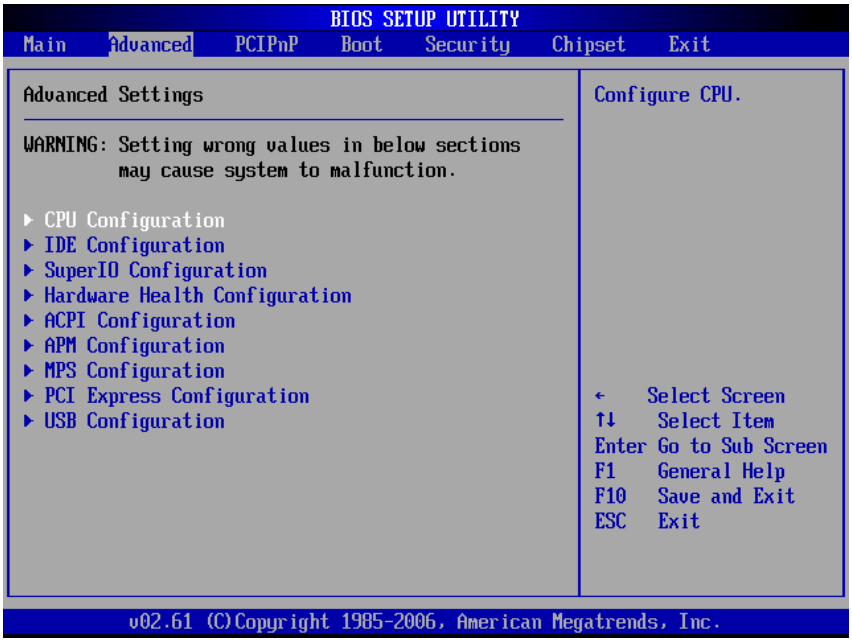
System Time or *System Date* using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

3.4 Advanced Menu

The Advanced menu allows users to set configuration of the CPU and other system devices. You can select any of the items in the left frame of the screen to go to the sub menus:

- CPU Configuration
- IDE Configuration
- SuperIO Configuration
- Hardware Health Configuration
- ACPI Configuration
- APM Configuration
- MPS Configuration
- PCI Express Configuration
- USB Configuration

For items marked with "►", please press <Enter> for more options.



- **Configure advanced CPU settings**

This screen shows the CPU Configuration, and you can change the value of the selected option.

- **Max CPUID Value Limit**

You can enable this item to let legacy operating systems boot even without support for CPUs with extended CPU ID functions.

- **Execute-Disable Bit Capability**

This item helps you enable or disable the No-Execution Page Protection Technology.

- **Hyper Threading Technology**

Use this item to enable or disable Hyper-Threading Technology, which makes a single physical processor perform multi-tasking function as two logical ones.

- **Intel (R) SpeedStep (tm) tech**

This item helps you enable or disable the Intel SpeedStep Technology.

- **Intel (R) C-STATE tech**

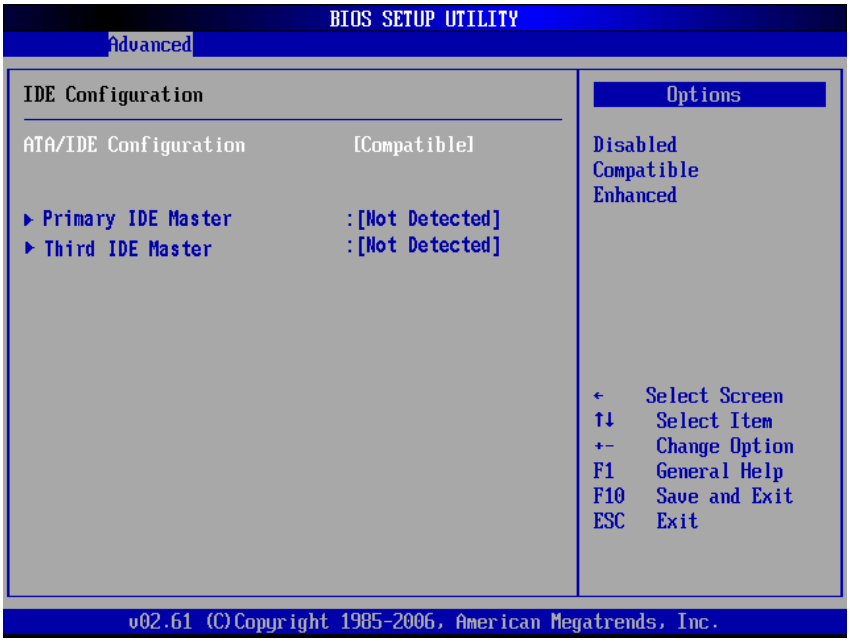
Use this item to enable or disable the C-State technology.

➢ **Enhanced C-States**

This item allows you to enable or disable any available enhanced C-states (C1E, C2E, C3E, C4E and Hard C4E).

- **IDE Configuration**

You can use this screen to select options for the IDE Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen. For items marked with "▶", please press <Enter> for more options.

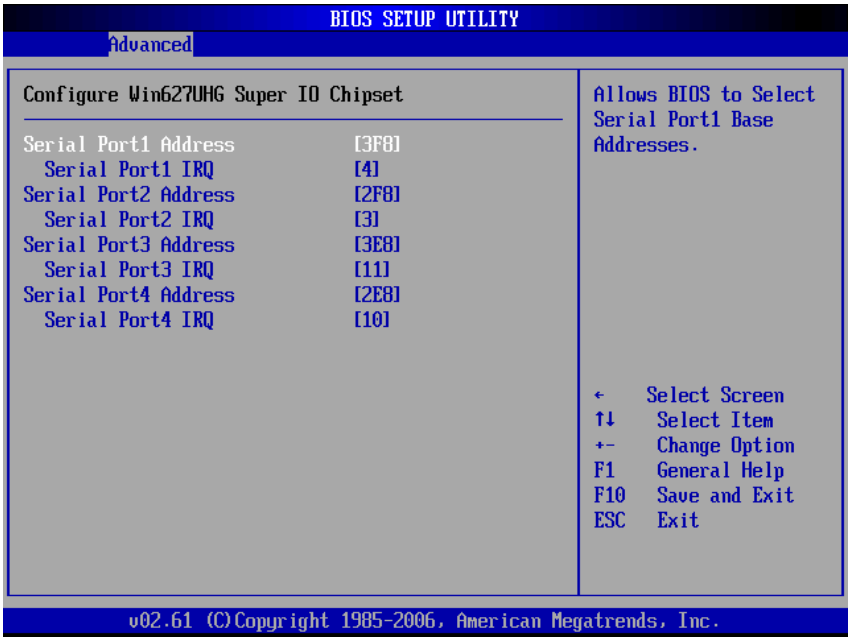


➢ **Primary/Secondary/Third IDE Master/Slave**

Select one of the hard disk drives to configure IDE devices installed in the system by pressing <Enter> for more options.

- **SuperIO Configuration**

You can use this screen to select options for the SuperIO Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen.



- **Serial Port1 Address**

This item specifies the base I/O port address and Interrupt Request address of serial port 1. The Optimal setting is *3F8/IRQ4*. The Fail-Safe default setting is *3F8*.

- **Serial Port1 IRQ**

This item specifies the IRQ used by the serial port 1.

- **Serial Port2 Address**

This item specifies the base I/O port address and Interrupt Request address of serial port 2. The Optimal setting is *2F8/IRQ3*. The Fail-Safe setting is *2F8*.

- **Serial Port2 IRQ**

This item specifies the IRQ used by the serial port 2.

- **Serial Port3 Address**

This item specifies the base I/O port address and Interrupt Request address of serial port 3.

- **Serial Port3 IRQ**

This item specifies the IRQ used by the serial port 3.

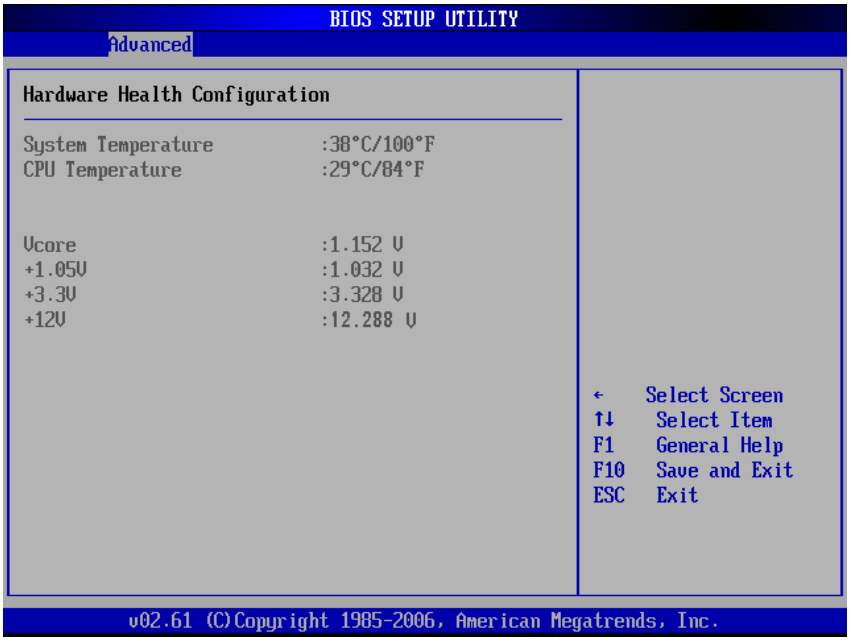
- **Serial Port4 Address**

This item specifies the base I/O port address and Interrupt Request address of serial port 4.

- **Serial Port4 IRQ**

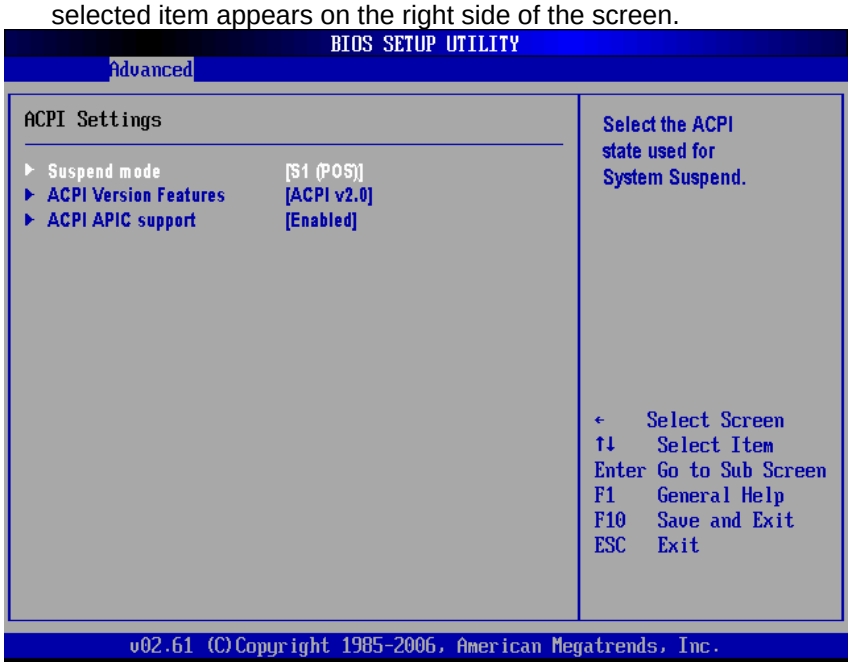
This item specifies the IRQ used by the serial port 4.

- **Hardware Health Configuration**
  This screen shows the Hardware Health Configuration, and a description of the selected item appears on the right side of the screen.

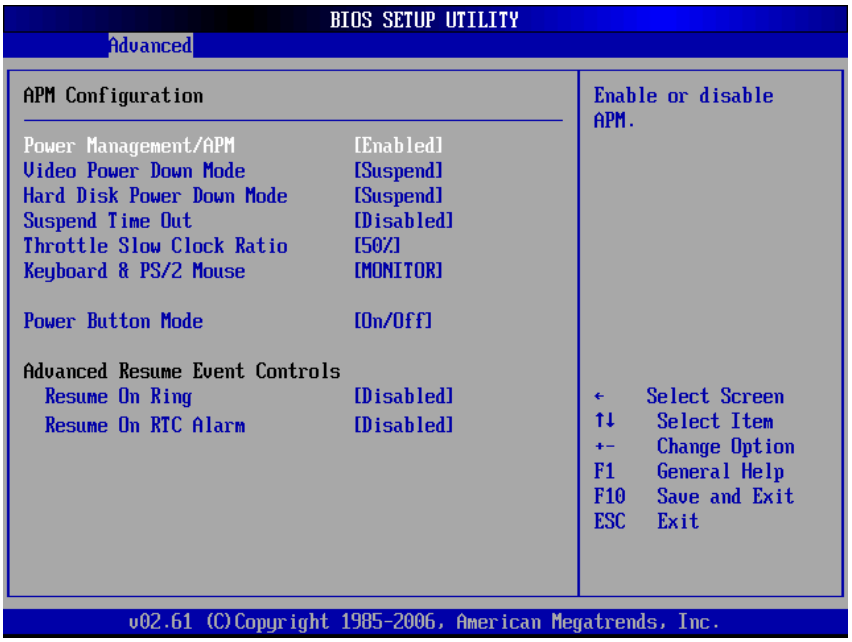


  - **System Temperature/CPU Temperature**
    These items display the temperature of CPU and System, Vcore, etc.

- **ACPI Settings**
  You can use this screen to select options for the ACPI Settings, and change the value of the selected option. A description of the selected item appears on the right side of the screen.



- **APM Configuration**
  You can use this screen to select options for the APM Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen.



  - **Power Management/APM**

Set this item to allow Power Management/APM support. The default setting is *Enabled*.

Disabled	Set this item to prevent the chipset power management and APM (Advanced Power Management) features.
Enabled	Set this item to allow the chipset power management and APM (Advanced Power Management) features. This is the default setting.

  - **Video Power Down Mode**

This option specifies the Power State that the video subsystem enters when the BIOS places it in a power saving state after the specified period of display inactivity has

expired. The default setting is *Suspend*.

Disabled	This setting prevents the BIOS from initiating any power saving modes concerned with the video display or monitor.
Suspend	This option places the monitor into suspend mode after the specified period of display inactivity has expired. This means the monitor is not off. The screen will appear blacked out. The standards do not cite specific power ratings because they vary from monitor to monitor, but this setting use less power than Standby mode. This is the default setting.

- **Hard Disk Drive Power Down Mode**

This option specifies the power conserving state that the hard disk drive enters after the specified period of hard drive inactivity has expired. The default setting is *Suspend*.

Disabled	This setting prevents hard disk drive power down mode.
Suspend	This option cuts the power to the hard disk drives during a system suspend. This is the default setting.

- **Suspend Time Out (Minute)**

This option specifies the length of time the system waits before it enters suspend mode. The default setting is *Disabled*.

Disabled	This setting prevents the system from entering suspend mode. This is the default setting.
1 Min	Set this item to allow the computer system to enter suspend mode after being inactive for 1 minute.
4 Min	Set this item to allow the computer system to enter suspend mode after being inactive for 4 minutes.
10 Min	Set this item to allow the computer system to enter suspend mode after being inactive for 10 minutes.

- **Throttle Slow Clock Ratio**

Use this item to specify the speed of the system clock when running the power saving states.

- **Power Button Mode**

This option specifies how the externally mounted power

button on the front of the computer chassis is used. The default setting is *On/Off*.

On/Off	Pushing the power button turns the computer on or off. This is the default setting. This is the default setting.
Suspend	Pushing the power button places the computer in Suspend mode or Full On power mode.

***** Advanced Resume Event Controls *****

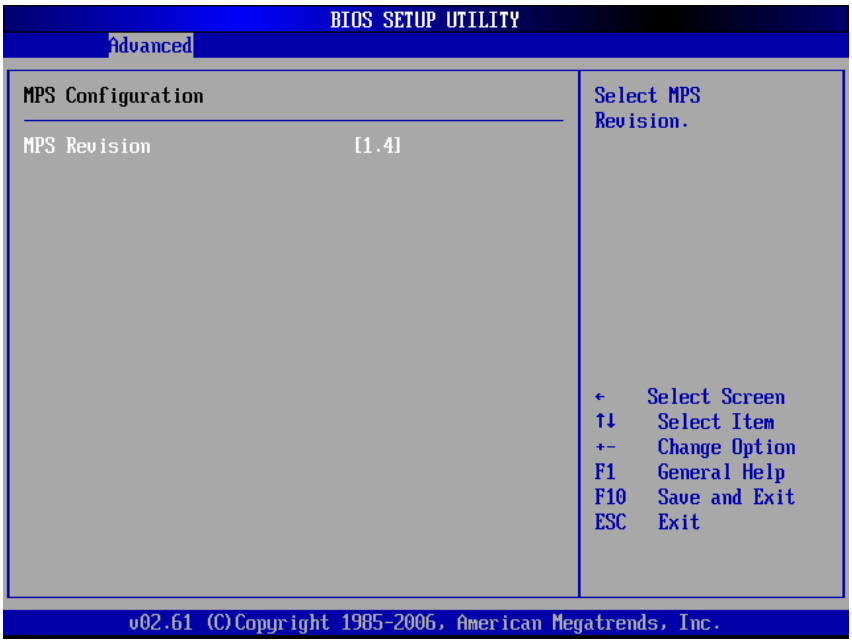
- **Resume On Ring**

This item enables or disables the function of Resume On Ring that resumes the system through incoming calls.

- **Resume On RTC Alarm**

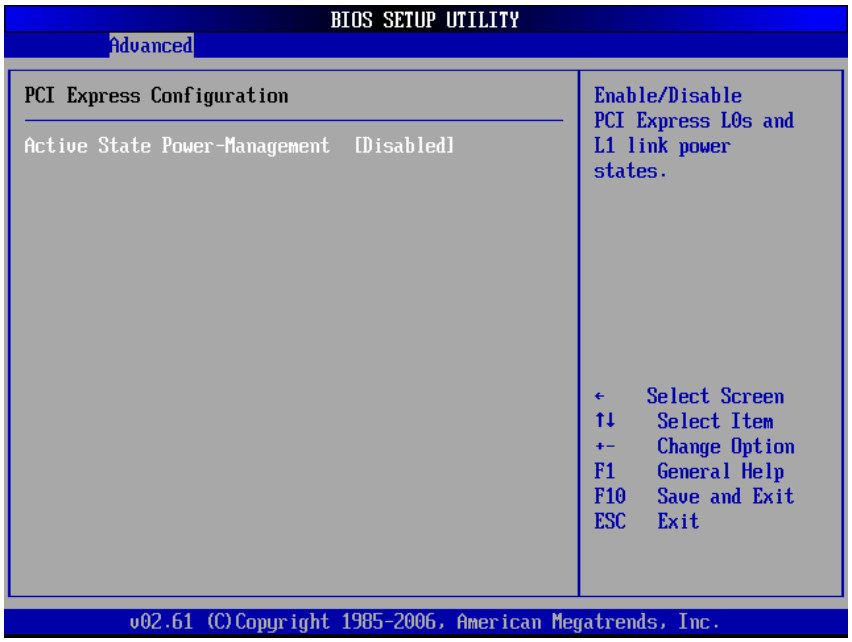
You can set "Resume On RTC Alarm" item to enabled and key in Data/time to power on system.

- **MPS Configuration**
  This screen shows the MPS (Multi Processor Specification) Configuration, and you can change its value. A description of the selected item appears on the right side of the screen.



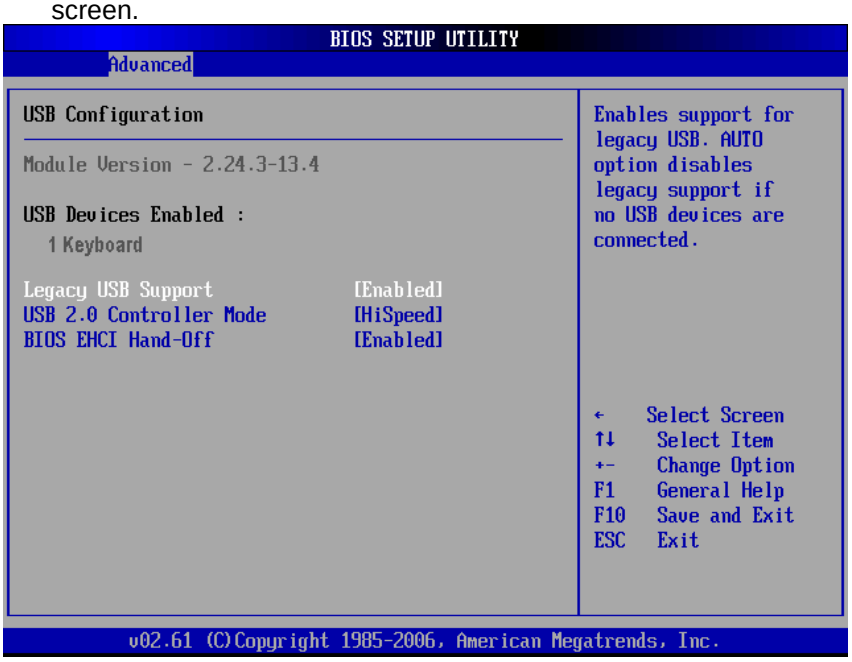
  - **MPS Revision**
    Use this item to select MPS (Multi Processor Specification) Revision 1.1 or 1.4. The default setting is *1.4*.

- **PCI Express Configuration**
  This screen shows the PCI Express Configuration, and you can change its value. A description of the selected item appears on the right side of the screen.



  - **Active State Power-Management**
    Use this item to enable or disable the function of Active State Power-Management to provide you with lower power consumption. The default setting is *Disabled*.

- **USB Configuration**
  You can use this screen to select options for the USB Configuration, and change the value of the selected option. A description of the selected item appears on the right side of the screen.


BIOS SETUP UTILITY
Advanced
USB Configuration
Module Version - 2.24.3-13.4
USB Devices Enabled :
1 Keyboard
Legacy USB Support [Enabled]
USB 2.0 Controller Mode [HiSpeed]
BIOS EHCI Hand-Off [Enabled]
Enables support for legacy USB. AUTO option disables legacy support if no USB devices are connected.
← Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
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  - **Legacy USB Support**

Use this item to enable or disable support for USB device on legacy operating system. The default setting is *Enabled*.

  - **USB 2.0 Controller Mode**

Use this item to configure the USB 2.0 controller. The default setting is *HiSpeed*.

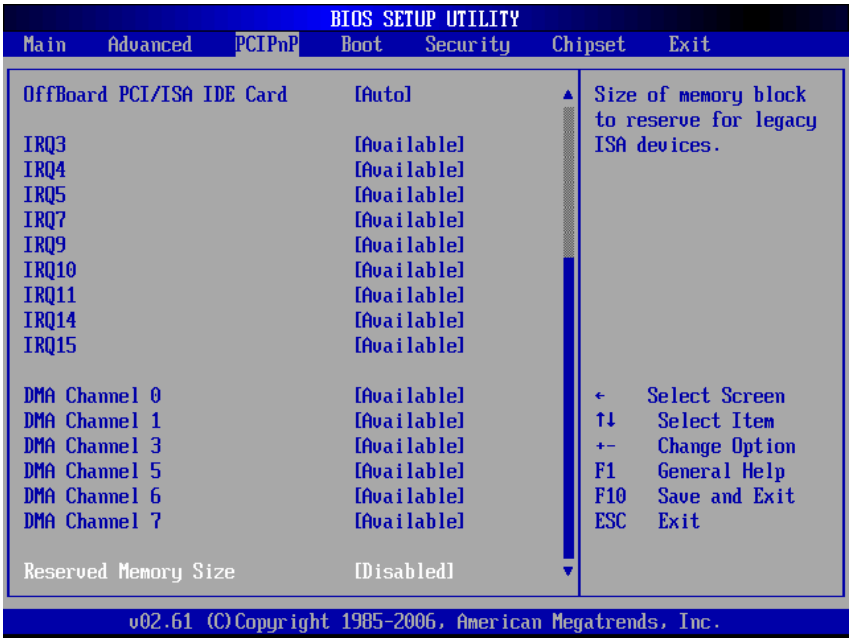
  - **BIOS EHCI Hand-Off**

Enabling this item provide the support for operating systems without an EHCI hand-off feature. The default setting is *Enabled*.

3.5 PCI PnP Menu

The PCI PnP menu allows users to change the advanced settings for PCI/PnP devices.

(1)



(2)

- **Clear NVRAM**

Use this item to clear the data in the NVRAM (CMOS). Here are the options for your selection, *No* and *Yes*.

- **Plug & Play O/S**

When the setting is No, Use this item to configure all the devices in the system. When the setting is Yes and if you install a Plug and Play operating system, the operating system configures the Plug and Play devices not required for boot. The default setting is *Yes*.

- **PCI Latency Timer**

This item controls how long a PCI device can hold the PCI bus before another takes over. The longer the latency, the longer the PCI device can retain control of the bus before handing it over to another PCI device. There are several options for your selection.

- **Allocate IRQ to PCI VGA**

This item allows BIOS to choose an IRQ to assign for the PCI VGA card. Here are the options for your selection, *No*

and *Yes*.

- **Palette Snooping**

Some old graphic controllers need to "snoop" on the VGA palette, and then map it to their display as a way to provide boot information and VGA compatibility. This item allows such snooping to take place. Here are the options for your selection, *Disabled* and *Enabled*.

- **PCI IDE BusMaster**

This item is a toggle for the built-in driver that allows the onboard IDE controller to perform DMA (Direct Memory Access) transfer. Here are the options for your selection, *Disabled* and *Enabled*.

- **OffBoard PCI/ISA IDE Card**

This item is for any other non-onboard PCI/ISA IDE controller adapter. There are several options for your selection.

- **IRQ3/4/5/7/9/10/11/14/15**

These items will allow you to assign each system interrupt a type, depending on the type of device using the interrupt. The option "Available" means the IRQ is going to assign automatically. Here are the options for your selection, *Available* and *Reserved*.

- **DMA Channel 0/1/3/5/6/7**

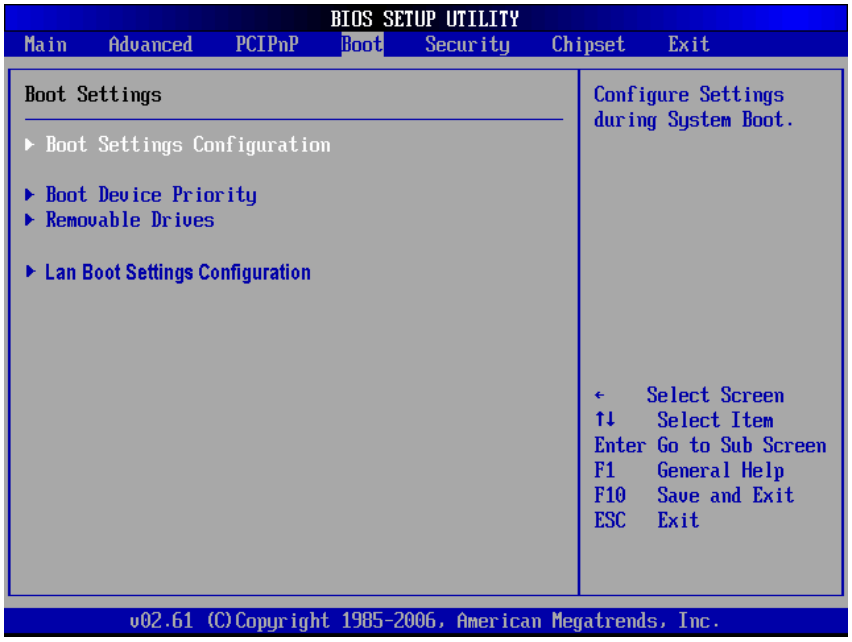
These items will allow you to assign each DMA channel a type, depending on the type of device using the channel. The option "Available" means the channel is going to assign automatically. Here are the options for your selection, *Available* and *Reserved*.

3.6 Boot Menu

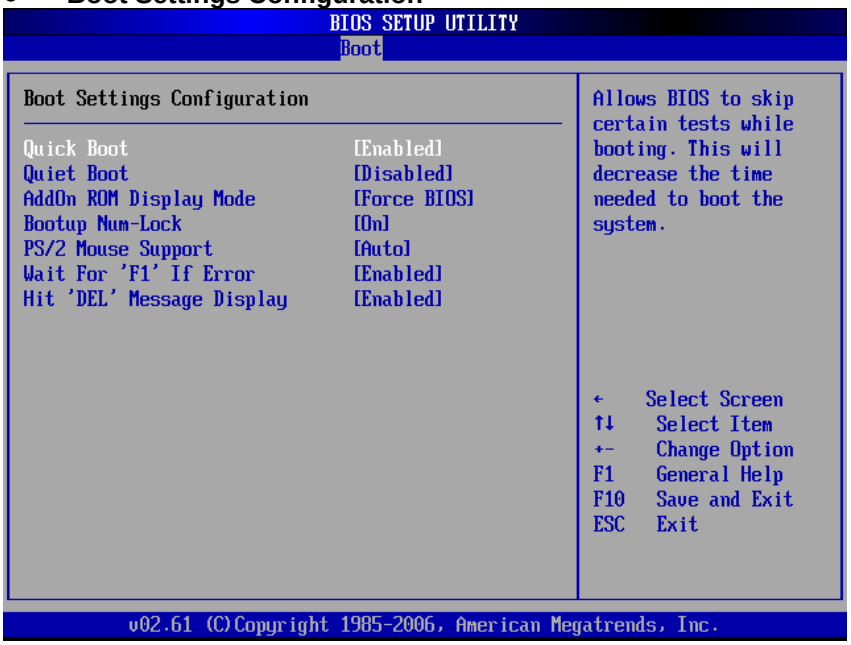
The Boot menu allows users to change boot options of the system. You can select any of the items in the left frame of the screen to go to the sub menus:

- Boot Settings Configuration
- Boot Device Priority
- Removable Drives
- Lan Boot Settings Configuration

For items marked with "►", please press <Enter> for more options.



- **Boot Settings Configuration**


BIOS SETUP UTILITY
Boot
Boot Settings Configuration
Quick Boot [Enabled]
Quiet Boot [Disabled]
AddOn ROM Display Mode [Force BIOS]
Bootup Num-Lock [On]
PS/2 Mouse Support [Auto]
Wait For 'F1' If Error [Enabled]
Hit 'DEL' Message Display [Enabled]
Allows BIOS to skip certain tests while booting. This will decrease the time needed to boot the system.
← Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
v02.61 (C)Copyright 1985-2006, American Megatrends, Inc.

➢ **Quick Boot**

Enabling this item lets the BIOS skip some power on self tests (POST). The default setting is *Enabled*.

➢ **Quiet Boot**

Disabled	Set this item to allow the computer system to display the POST messages.
Enabled	Set this item to allow the computer system to display the OEM logo. This is the default setting.

➢ **AddOn ROM Display Mode**

This item selects the display mode for option ROM. The default setting is *Force BIOS*.

➢ **Boot Num-Lock**

Use this item to select the power-on state for the NumLock. The default setting is *On*.

➢ **PS/2 Mouse Support**

This item determines if the BIOS should reserve IRQ12 for the PS/2 mouse or allow other devices to make use of this

IRQ. Here are the options for your selection, *Auto*, *Enabled* and *Disabled*.

➢ **Wait For 'F1' If Error**

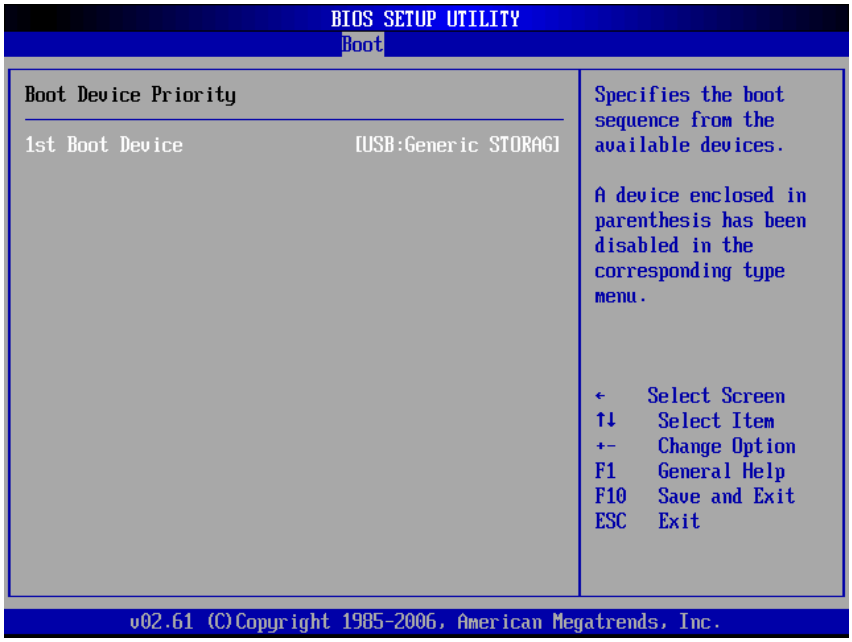
If this item is enabled, the system waits for the F1 key to be pressed when error occurs. The default setting is *Enabled*.

➢ **Hit 'DEL' Message Display**

If this item is enabled, the system displays the message "Press DEL to run Setup" during POST. The default setting is *Enabled*.

- **Boot Device Priority**

The Boot Device Priority screen specifies the the boot device priority sequence from the available devices.


BIOS SETUP UTILITY
Boot
Boot Device Priority
1st Boot Device
[USB:Generic STORAG]
Specifies the boot sequence from the available devices.
A device enclosed in parenthesis has been disabled in the corresponding type menu.
← Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
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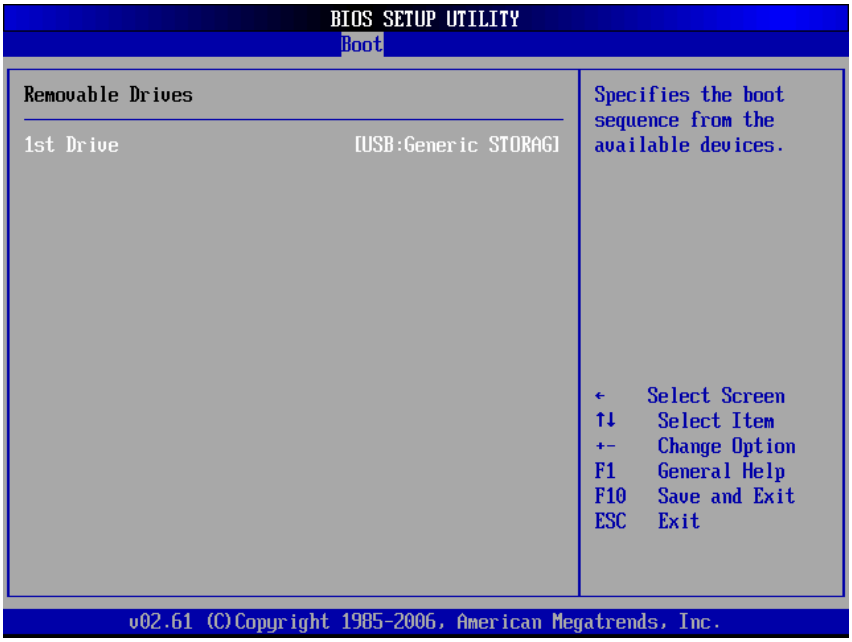
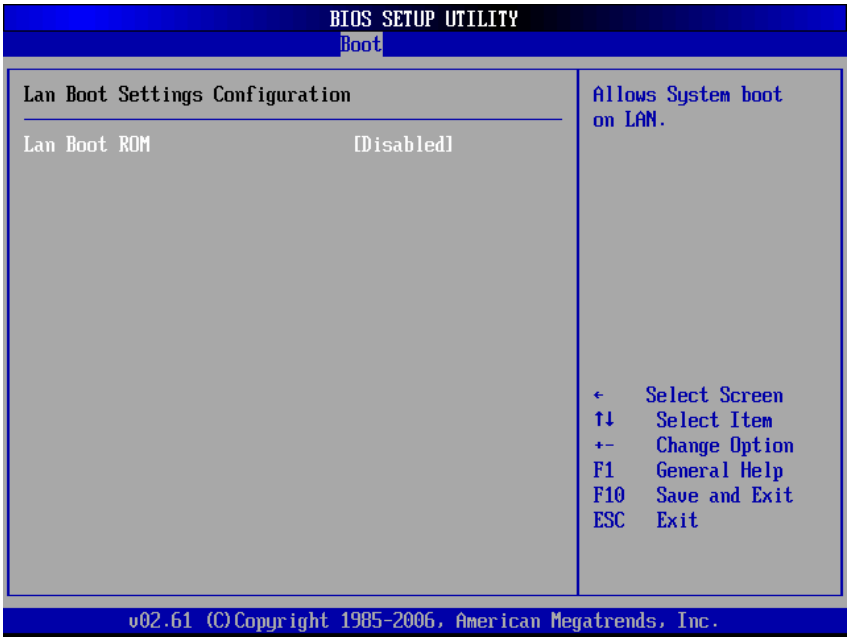
- **Removable Drives**
  Use this screen to view the removable drives in the system. The BIOS will attempt to arrange the removable drive boot sequence automatically. You can also change the booting sequence.

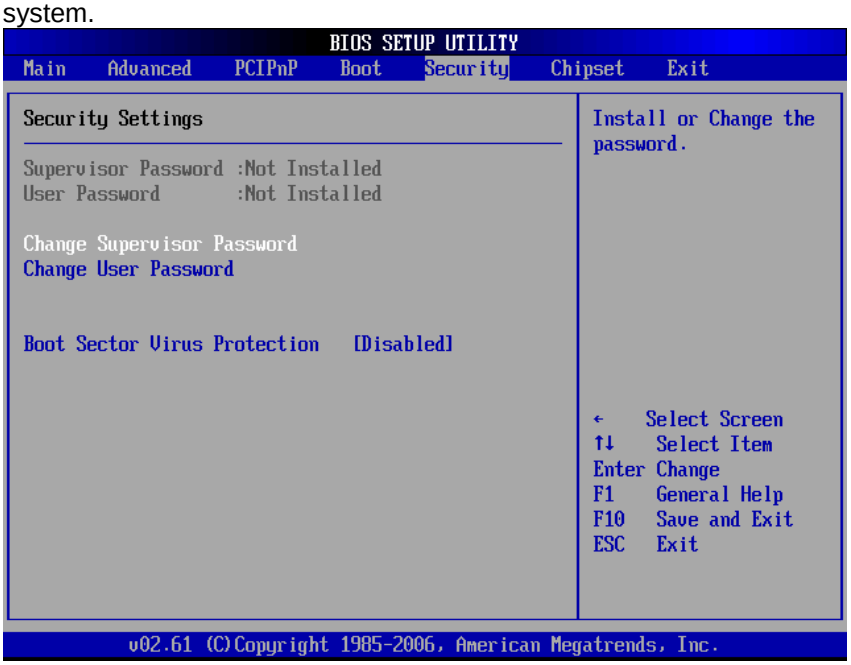


- **Lan Boot Settings Configuration**
  The Lan Boot Settings Configuration can enable or disable Lan Boot ROM to allow the system boot on LAN.



3.7 Security Menu

The Security menu allows users to change the security settings for the system.



- **Supervisor Password**

This item indicates whether a supervisor password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

- **User Password**

This item indicates whether a user password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

- **Change Supervisor Password**

Select this option and press <Enter> to access the sub menu. You can use the sub menu to change the supervisor password.

- **Change User Password**

Select this option and press <Enter> to access the sub menu. You can use the sub menu to change the user

password.

- **Boot Sector Virus Protection**

This option is near the bottom of the Security Setup screen. The default setting is *Disabled*.

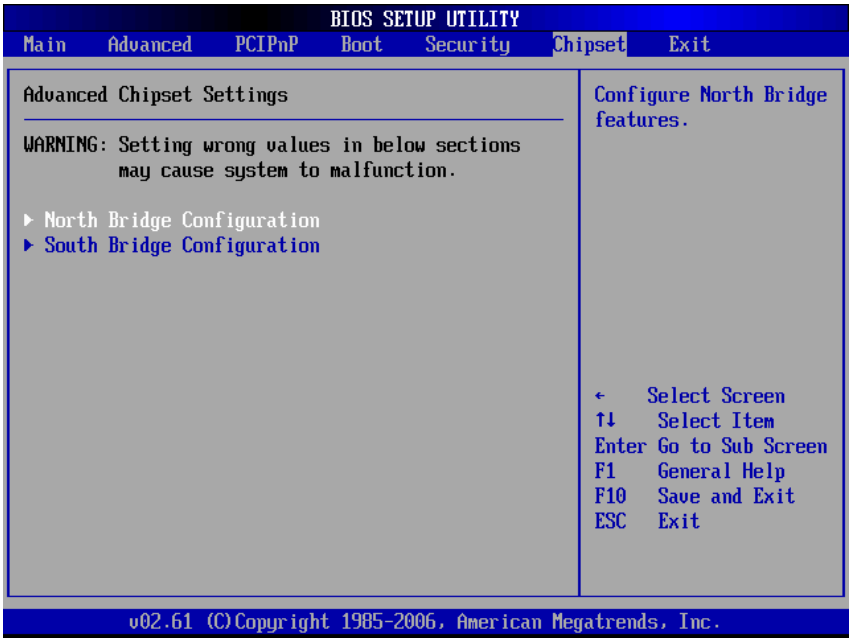
Disabled	Set this item to prevent the Boot Sector Virus Protection. This is the default setting.
Enabled	Select Enabled to enable boot sector protection. It displays a warning when any program (or virus) issues a Disk Format command or attempts to write to the boot sector of the hard disk drive. If enabled, the following appears when a write is attempted to the boot sector. You may have to type N several times to prevent the boot sector write. Boot Sector Write! Possible VIRUS: Continue (Y/N)? _ The following appears after any attempt to format any cylinder, head, or sector of any hard disk drive via the BIOS INT 13 Hard disk drive Service: Format!!! Possible VIRUS: Continue (Y/N)?

3.8 Chipset Menu

The Chipset menu allows users to change the advanced chipset settings. You can select any of the items in the left frame of the screen to go to the sub menus:

- North Bridge Configuration
- South Bridge Configuration

For items marked with "►", please press <Enter> for more options.


BIOS SETUP UTILITY
Main Advanced PCIPnP Boot Security Chipset Exit
Advanced Chipset Settings
WARNING: Setting wrong values in below sections may cause system to malfunction.
North Bridge Configuration
South Bridge Configuration
Configure North Bridge features.
← Select Screen
↑↓ Select Item
Enter Go to Sub Screen
F1 General Help
F10 Save and Exit
ESC Exit
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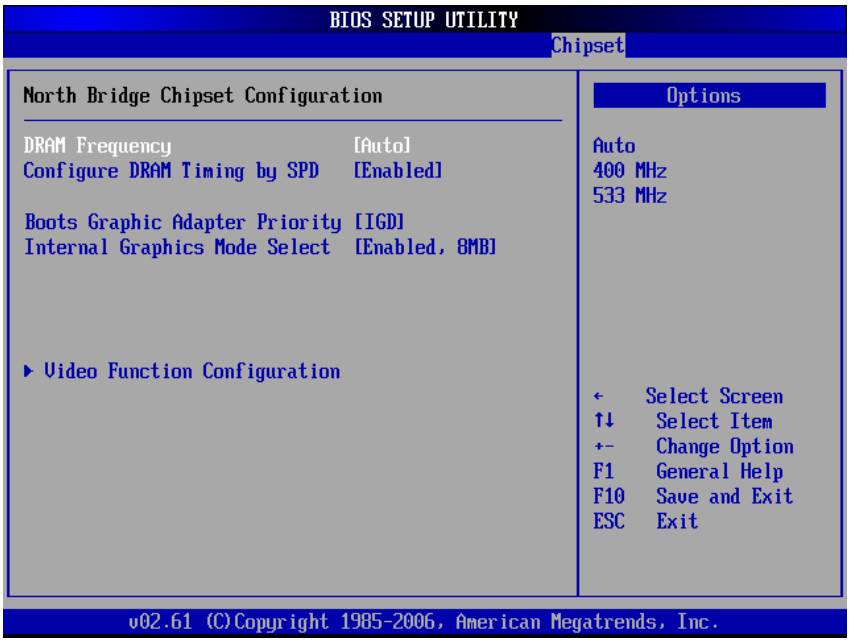
- **North Bridge Configuration**



➢ **DRAM Frequency**

This item allows you to control the Memory Clock.

➢ **Configure DRAM Timing by SPD**

This item can enable or disable DRAM timing by SPD (Serial Presence Detect) device, which is a small EEPROM chip on the memory module, containing important information about the module speed, size, addressing mode and various parameters.

➢ **Boot Graphic Adapter Priority**

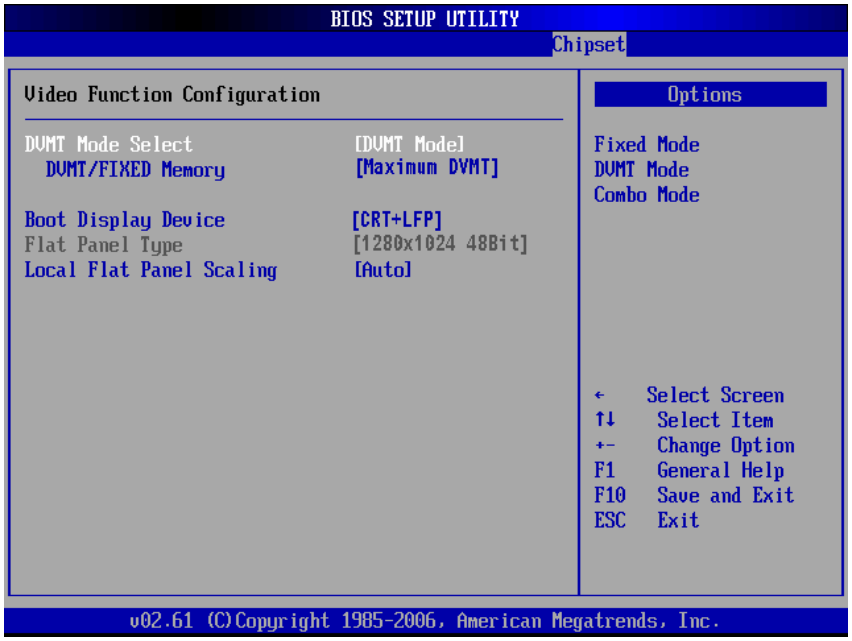
This item allows you to select the graphics controller as the primary boot device.

➢ **Internal Graphics Mode Select**

This item allows you to select the amount of system memory used by the internal graphics device.

➢ **Video Function Configuration**

Press <Enter> for the sub-menu for setting up video function.


BIOS SETUP UTILITY
Chipset
Video Function Configuration
DVMT Mode Select
[DVMT Mode]
DVMT/FIXED Memory
[Maximum DVMT]
Boot Display Device
[CRT+LFP]
Flat Panel Type
[1280x1024 48Bit]
Local Flat Panel Scaling
[Auto]
Options
Fixed Mode
DVMT Mode
Combo Mode
← Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
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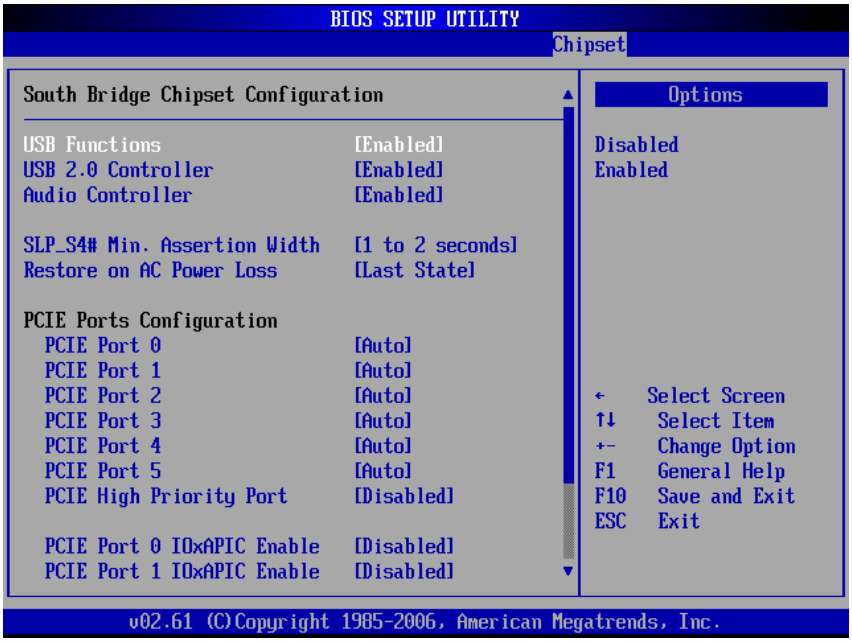
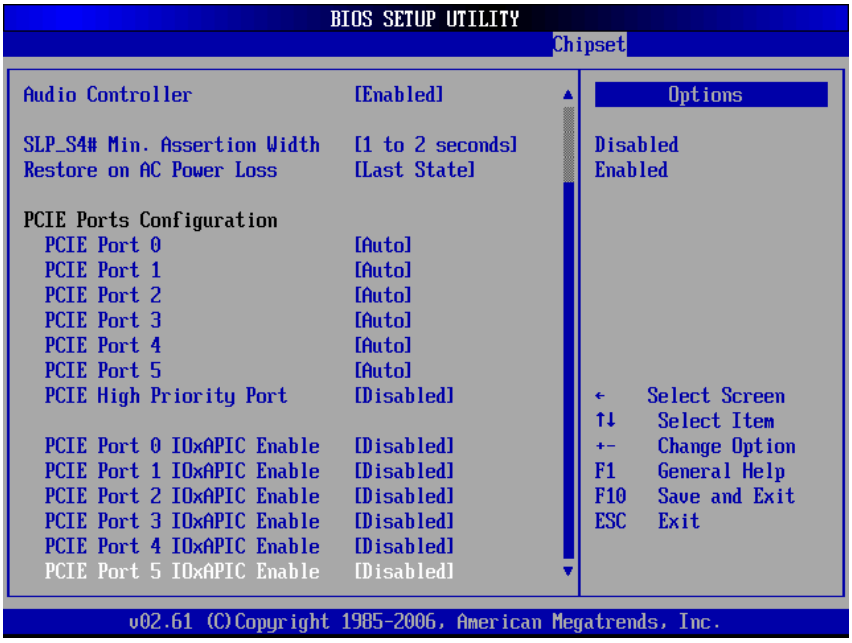
- **South Bridge Configuration**



(1)


BIOS SETUP UTILITY
Chipset
Audio Controller [Enabled]
SLP_S4# Min. Assertion Width [1 to 2 seconds]
Restore on AC Power Loss [Last State]
PCIE Ports Configuration
PCIE Port 0 [Auto]
PCIE Port 1 [Auto]
PCIE Port 2 [Auto]
PCIE Port 3 [Auto]
PCIE Port 4 [Auto]
PCIE Port 5 [Auto]
PCIE High Priority Port [Disabled]
PCIE Port 0 IOxAPIC Enable [Disabled]
PCIE Port 1 IOxAPIC Enable [Disabled]
PCIE Port 2 IOxAPIC Enable [Disabled]
PCIE Port 3 IOxAPIC Enable [Disabled]
PCIE Port 4 IOxAPIC Enable [Disabled]
PCIE Port 5 IOxAPIC Enable [Disabled]
Options
Disabled
Enabled
← Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
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(2)

- **USB Function**

This item allows you to enable or disable USB function.

- **USB 2.0 Controller**

This item allows you to enable or disable the USB 2.0 controller.

- **Audio Controller**

This item allows you to enable or disable the audio support.

- **SLP_S4# Min. Assertion Width**

This item allows you to set the SLP_S4# Assertion Width.

- **Restore on AC Power Loss**

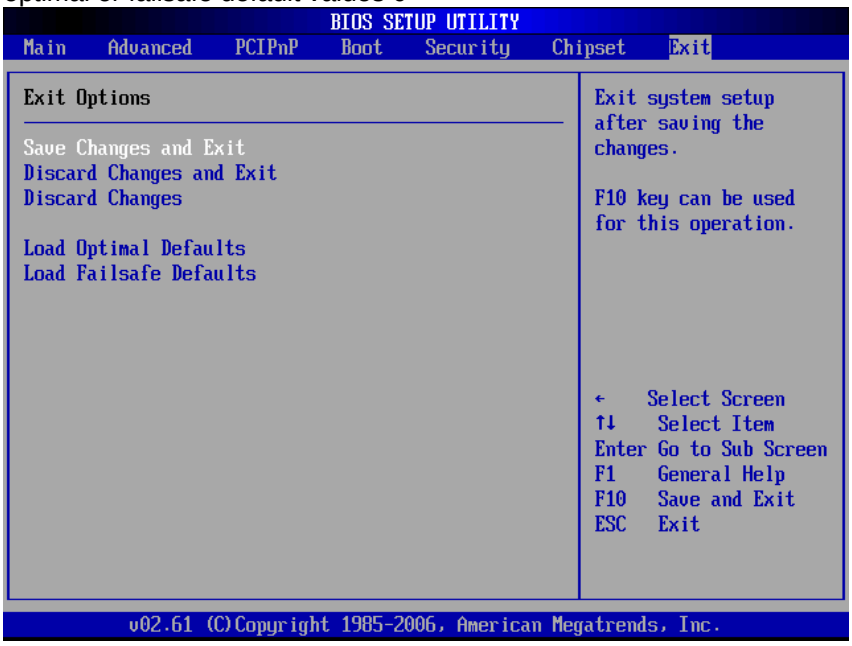
This item can control how the PC will behave once power is restored following a power outage, or other unexpected shutdown.

- **PCIE Port Configuration**

This item allows you to set or disable the PCI Express Ports.

3.9 Exit Menu

The Exit menu allows users to load your system configuration with optimal or failsafe default values 0


BIOS SETUP UTILITY
Main Advanced PCIPnP Boot Security Chipset Exit
Exit Options
Save Changes and Exit
Discard Changes and Exit
Discard Changes
Load Optimal Defaults
Load Failsafe Defaults
Exit system setup after saving the changes.
F10 key can be used for this operation.
← Select Screen
↑↓ Select Item
Enter Go to Sub Screen
F1 General Help
F10 Save and Exit
ESC Exit
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- **Save Changes and Exit**

When you have completed the system configuration changes, select this option to leave Setup and reboot the computer so the new system configuration parameters can take effect. Select *Save Changes and Exit* from the Exit menu and press <Enter>. Select Ok to save changes and exit.

- **Discard Changes and Exit**

Select this option to quit Setup without making any permanent changes to the system configuration. Select *Discard Changes and Exit* from the Exit menu and press <Enter>. Select Ok to discard changes and exit.

- **Discard Changes**

Use this item to abandon all changes.

- **Load Optimal Defaults**

It automatically sets all Setup options to a complete set of default settings when you select this option. The Optimal settings are designed for maximum system performance, but may not work best for all computer applications. In particular, do not use the Optimal Setup options if your computer is experiencing system configuration problems. Select Load Optimal Defaults from the Exit menu and press <Enter>.

- **Load Fail-Safe Defaults**

It automatically sets all Setup options to a complete set of default settings when you select this option. The Fail-Safe settings are designed for maximum system stability, but not maximum performance. Select the Fail-Safe Setup options if your computer is experiencing system configuration problems.
Select Load Fail-Safe Defaults from the Exit menu and press <Enter>. Select Ok to load Fail-Safe defaults.

CHAPTER 4
DRIVER INSTALLATION

4.1 System

IFO2175-830 supports Windows XP/ Windows Vista to facilitate the installation of system driver, please carefully read the instructions in this chapter before start installing.

1. Insert Driver CD in the disk, and select the \IFO2175-830\Driver\..

2. Please follow folder Step 1 to Step 7 for IFO2175-830 driver installation.

4.2 Touch Screen

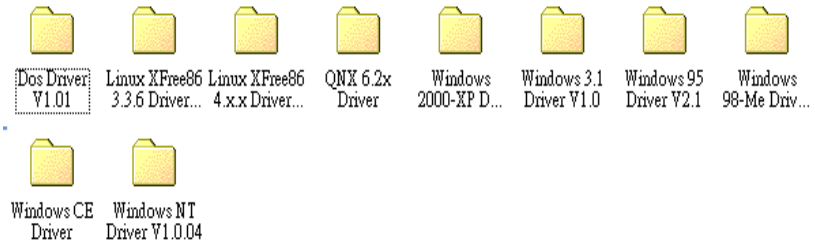
4.2.1 Specification

Touch Screen	For 5-wire analog resistive type
Touch Screen Controller	PenMount 6000 microcontroller
Communications	USB Full-speed, 12Mbps
Baud Rate	19200/ 9600
Resolution	1024 x 1024
Power Input	5V
Power Consumption	Standby Mode : 13.4mA; Active Mode: 24.6mA (VCC=5V, Top sheet Panel Resistance: 274 ohm, Bottom sheet Panel Resistance: 770 ohm)
Board Size	60 x 26 mm
Portrait	Support 90o, 180o and 270o screen rotation

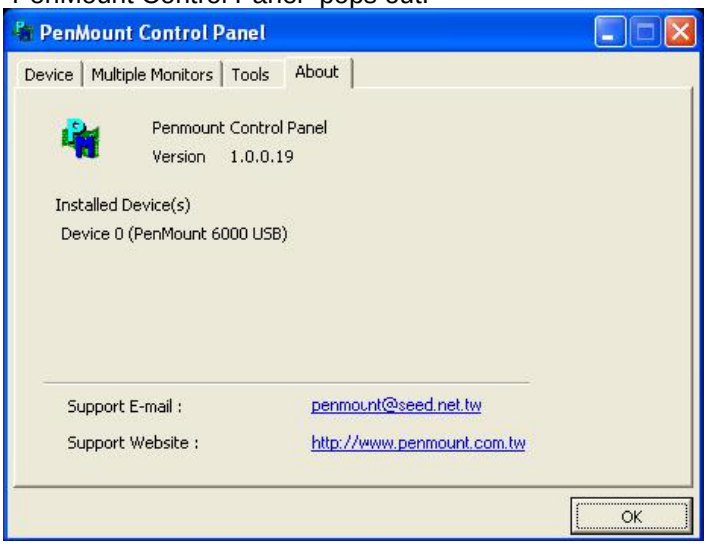
4.2.2 Driver Installation

The **IFO2175-830 Series** provides a driver of the touch screen that users can install it under operating system Windows XP/ Windows Vista. To facilitate this touch screen driver installation, users should read the instructions in this chapter carefully before start the installation.

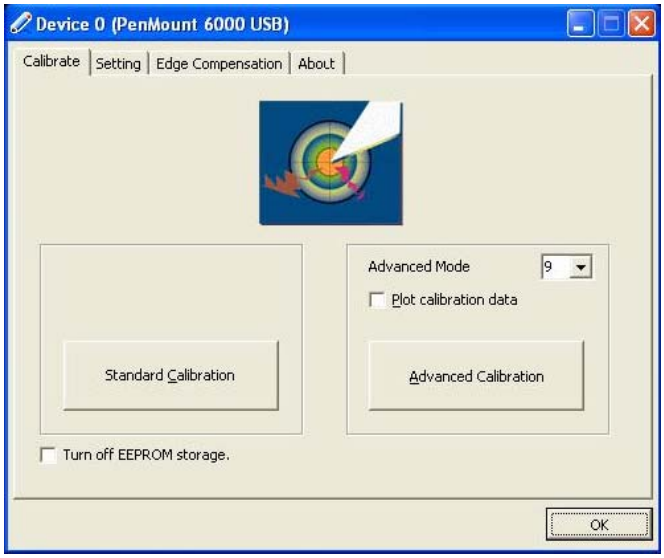
1. Insert Driver CD and select the D:\IFO2175-830\Driver\Step6 - Touch\Driver\Win2000-XP\setup.exe



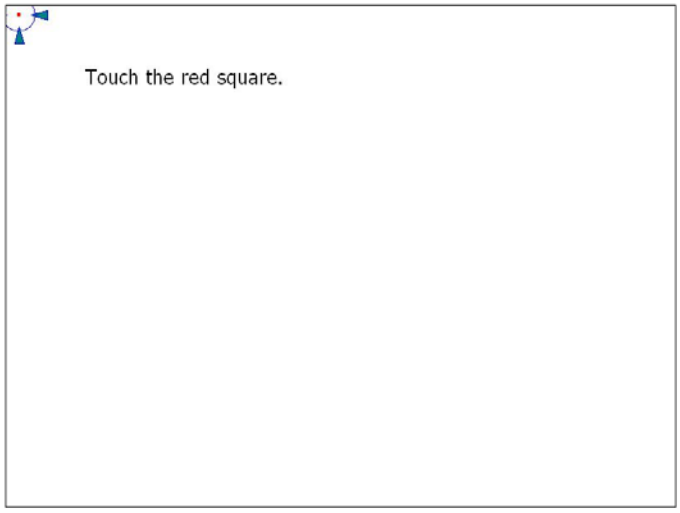
2. Follow the installing procedure and press OK.
3. Click Start menu and select "PenMount Utilities", and then a "PenMount Control Panel" pops out.



4. Click the "Standard Calibration" button.



5. Calibration:
   To adjust the display with touch panel, click "Calibration" and follow the calibrate point to do calibration; there are five points on screen for calibration.



6. Press OK.